

What is claimed is:

1. A voice coil for a disk drive comprising: a spiral winding of conductive material defining a flat band with a generally triangular shape having an open center, first and second active leg portions and an inactive leg portion, a first curved corner portion connecting the first and second active leg portions, a second curved corner portion connecting the first active leg portion with the inactive leg portion, and a third curved corner portion connecting the second leg portion with the inactive leg portion, the first and second active leg portions curving inward of the band, the inactive leg portion curving outward of the band.

2. The coil of claim 1, wherein the radius of curvature of the first curved corner portion is greater than the radius of curvature of the second and third curved corner portions.

3. The coil of claim 2, wherein the radius of curvature of the second curved corner portion is equal to the radius of curvature of the third curved corner portion.

4. The coil of claim 1, wherein the cross-sectional area of the band varies along the length of the spiral winding.

5. The coil of claim 4, wherein the cross-sectional area of the segments that define the inactive leg portion is smaller than the cross-sectional area of the remaining segments.



8. The first and second active leg portions curving inward of the band, the inactive leg portion curving outward of the band.

9. The coil of claim 6, wherein the radius of curvature of the first curved corner portion is greater than the radius of curvature of the second and third curved corner portions.

10. The coil of claim 9, wherein the radius of curvature of the second curved corner portion is equal to the radius of curvature of the third curved corner portion.

[illegible]



16. In combination with an actuator member in a disk drive, a voice coil secured to a face of the actuator member, said voice coil comprising a continuous spiral winding of wire defining a flat band with a generally triangular shape with an open center, first and second active leg portions and an inactive leg portion, a first curved corner portion connecting the first and second active leg portions, a second curved corner portion connecting the first active leg portion with the inactive leg portion, and a third curved corner portion connecting the second leg portion with the inactive leg portion, the cross-sectional area of the band varying along its length.

17. The coil of claim 16, wherein the cross-sectional area of the segments that define the inactive leg portion is smaller than the cross-sectional area of the remaining segments.

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18. The first and second active leg portions curving inward of the band, the inactive leg portion curving outward of the band.

19. The coil of claim 16, wherein the radius of curvature of the first curved corner portion is greater than the radius of curvature of the second and third curved corner portions.

20. The coil of claim 19, wherein the radius of curvature of the second curved corner portion is equal to the radius of curvature of the third curved corner portion.

Figure 1 displays 16 histograms arranged in a 4x4 grid, showing the distribution of the number of non-zero elements in the rows of the matrix  $A$ . The rows are labeled 1 to 4 on the left, and the columns are labeled 1 to 4 on the top. Each histogram has a y-axis labeled 'Frequency' and an x-axis labeled 'Number of non-zero elements'. The distributions vary across the grid, with some rows showing a single peak and others showing multiple peaks or a wider spread.

21. A method of making a voice coil for a disk drive actuator, said method comprising the steps of providing a first, electrically insulating layer of material of a predetermined thickness; securing a second, electrically conductive layer of material onto the first layer; removing a predetermined portion of the second layer to form a planar, electrically conductive coil; securing a third electrically insulating layer of material to the second layer to form a coil laminate; securing the laminate to the actuator.

22. The method of claim 21, further comprising the step of providing adhesive to secure the first, second and third layers together.

23. The method of claims 22, wherein the first and third layers are polyimide and the second layer is copper.

24. The method of claim 21, wherein the step of removing a predetermined portion of the second layer includes photo-etching.

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